

10 rake without small amounts of vegetation and variances in soil
11 conditions clogging the catching and sifting means;
12 wherein the catching and sifting means includes,
13 a plurality of spaced fixed vanes, wherein the frame has a
14 top and a bottom and the vanes run across the bottom of the frame
15 from one side of the frame to the other side,
16 two pairs of rollers, one pair of rollers mounted on the one
17 side of the frame and the other pair of rollers mounted on the
18 other side of the frame, and ~~The minesweeper recited in claim 4~~
19 ~~wherein the catching and sifting means includes:~~
20 a pair of endless chains running across the top of the frame
21 and around the rollers.

1 6. (Original) The minesweeper recited in claim 5 wherein the
2 catching and sifting means includes:

3 a plurality of spaced beams carried by the pair of chains,
4 the beams lying across the spaced fixed vanes.

1 7. (Original) The minesweeper recited in claim 6 wherein the
2 catching and sifting means includes:

3 a plurality of teeth mounted on the beams.

1 8. (Original) The minesweeper recited in claim 7 wherein the
2 catching and sifting means includes:

3 means for turning the rollers to move the chains around a
4 loop so the teeth mounted on the beams rake sideways along the

5 vanes any mines, soil, rocks and other objects buried in the soil
6 passing over the rake and caught by the vanes, the teeth
7 partially meshing with the vanes and forcing the soil to fall
8 through while mines, and other objects larger than the vane
9 spacing are carried along the tops of the vanes and are ejected
10 to the side of the frame.

1 9. (Original) In a minesweeper having a two-sided frame with a
2 top and a bottom and adapted to be coupled to and pushed by a
3 tractor, and a rake pivoted from each side of the frame by
4 respective pairs of coupling bars of different lengths so that as
5 the rake moves away from the frame to bury itself in the soil,
6 the coupling bars rotate it to a less aggressive digging angle
7 that prevents the rake from stalling the tractor:
8 a plurality of spaced fixed vanes, wherein the frame has a
9 top and a bottom and the vanes run across the bottom of the frame
10 from one side of the frame to the other side;
11 two pairs of rollers, one pair of rollers mounted on the one
12 side of the frame and the other pair of rollers mounted on the
13 other side of the frame;
14 a pair of endless chains running across the top of the frame
15 and around the rollers,
16 a plurality of spaced beams carried by the pair of chains,
17 the beams lying across the spaced fixed vanes;
18 a plurality of teeth mounted on the beams; and,
19 a motor coupled to the rollers for turning the rollers to

20 move the chains around a loop so the teeth mounted on the beams
21 rake sideways along the vanes any mines, soil, rocks and other
22 objects buried in the soil passing over the rake and caught by
23 the vanes, the teeth partially meshing with the vanes and forcing
24 the soil to fall through while mines, and other objects larger
25 than the vane spacing are carried along the tops of the vanes and
26 are ejected to the side of the frame.

1 10. (Original) The minesweeper recited in claim 9 in combination
2 with the tractor.

1 15. (Currently Amended) In a method of sweeping mines including
2 the steps of:

3 pushing a two-sided frame and pivoting a rake from each side
4 of the frame by respective pairs of coupling bars of different
5 lengths so that as the rake moves away from the frame to bury
6 itself in the soil, the coupling bars rotate it to a less
7 aggressive digging angle; and

8 catching and sifting mines, soil, rocks and other objects
9 buried in the soil passing over the rake without small amounts of
10 vegetation and variances in soil conditions clogging the catching
11 and sifting means, wherein the catching and sifting step
12 includes:

13 running a plurality of spaced fixed vanes across the bottom
14 of the frame from one side of the frame to the other side,
15 mounting one pair of rollers on one side of the frame,

16 mounting another pair of rollers on the other side of the
17 frame, and

18 ~~The method of claim 14 wherein the catching and sifting step~~
19 ~~includes:~~

20 running an endless chain across the top of the frame and
21 around the rollers.

1 16. (Currently Amended) The method of claim ~~14~~ 15 wherein the
2 catching and sifting step includes:

3 running another endless chain across the top of the frame
4 and around the rollers.

1 17. (Original) The method of claim 16 wherein the catching and
2 sifting step includes:

3 supporting a plurality of spaced beams on the pair of
4 chains, the beams lying across the spaced fixed vanes.

1 18. (Original) The method of claim 17 wherein the catching and
2 sifting step includes:

3 mounting a plurality of teeth on the beams.

1 19. (Original) The method of claim 18 wherein the catching and
2 sifting step includes:

3 turning the rollers to move the chains around a loop so the
4 teeth mounted on the beams rake sideways along the vanes any
5 mines, soil, rocks and other objects buried in the soil passing

6 over the rake and caught by the vanes, the teeth partially
7 meshing with the vanes and forcing the soil to fall through while
8 mines, and other objects larger than the vane spacing are carried
9 along the tops of the vanes and are ejected to the side of the
10 frame.

1 20. (Original) The method of claim 19 wherein the frame is pushed
2 by a tractor.